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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,444	02/23/2001	Edgar Bolinth	P00,1953	1275
29177	7590	03/16/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			JACKSON, BLANE J	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/720,444	BOLINTH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Blane J Jackson	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Response to Remarks

1. The applicant argues that Coursey nor Hjern discloses controlling the telecommunication connections by the base stations in uncoordinated unlicensed system operation of the telecommunications system and in coordinated, licensed system operation of the telecommunications system wherein the first base station (private) does not operate independently from a second (public) base station. Further, the applicant claims the private/residential base station and the mobile station emulator of Coursey emulates a repeater.

Coursey does not teach a repeater but a Private/ Residential System (PRS) comprised of a Mobile Station Emulator (MSE) with functions similar to a public mobile station to provide a protocol in wireless communication to the public second base station and a Private /Residential Base Station (PRBS) that performs *independent base station control channel functions*. The MSE registers with the public radio network over the digital control channel and monitors its assigned paging channel for messages including request to the PBRS to accept a hand-in, change its channel or power level and may transmit a request for a hand-out, column 5, lines 14-29. The PBRS communicates with the mobile station on its control channel to control the hand-in and hand-out process. In the hand-out process, the mobile station indicates possible hand-out through MAHO measurements. Next, the PBRS alerts the mobile station of a possible hand-out. With mobile approval, the PBRS through the MSE provides a hand

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off request to the cellular network and with network acceptance, issues a hand off order to the mobile station, column 9, lines 18-51.

Further, the applicant claims Coursey nor Hjern teaches a Base Station Assisted Hand-Over presently claimed. However, Hjern is introduced to illustrate hand off between a public and private wireless system where the central unit CFP in DECT *carries out analysis of calls in progress to determine an appropriate hand off*. It then collects system parameters from the network and transmits this information to the mobile terminal where subsequent transfer between the systems can be activated by the fixed side of DECT or the mobile terminal, column 6, line 39 to column 7, line 49.

This opinion regarding the teachings of the prior art is reflected in the following rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coursey et al. (U.S. Patent 5,995,839) with a view to Hjern et al. (U.S. Patent 5,873,033).

As to claim 11, Coursey teaches a method for controlling handover of telecommunication connections between mobile parts and base stations in cellular telecommunications systems using wireless telecommunication including:

initiating a telecommunications connections by the mobile parts and controlling the telecommunications connections by the base stations in uncoordinated, unlicensed operation (private or personal communication system) of the telecommunications system and a coordinated, licensed operation of the (public cellular radiotelephone) telecommunications system (system summary: column 2, lines 26-49, column 3, line 31 to column 4, line 29 and initiating may be mobile registration for example when the mobile turns on, column 6, lines 53-66 or MAHO measurements made by the mobile station to indicate that a hand-off is possible, column 9, lines 18-34),

receiving on a first telecommunications Broadcast Control Channel in a first base station which supports uncoordinated, unlicensed system operation and associated with a first cell, a message relevant in a first monitoring mode for handing off telecommunications connections, the messages in each case being sent by at least one second base station, which is adjacent to the first base station which supports coordinated licensed system operation or uncoordinated unlicensed system operation and is in each case associated with a second cell (figure 1, Mobile Station Emulator (MSE) (14) portion of the Private/Residential System (PRS) (10) monitors the adjacent radio network DCCH control channel, column 5, lines 14-28, for instructions and messages including a request to the Private/ Residential Base Station (PRBS) to accept a hand off. Coursey further teaches specific methods for hand-in, column 8, lines 28 to

column 9, line 17 and hand-out, column 9, lines 18-51 utilizing MAHO measurements by the mobile terminal to approve hand-off.

Coursey teaches the mobile telephone performs MAHO measurements to determine if hand off is possible (column 9, lines 19-35); consequently, Coursey does not teach the first base station assesses information content and reception quality of the message and transmit a list of parameters for hand off purposes on a second control channel to the mobile located in the first (uncoordinated) cell.

Hjern also teaches a method for hand-off from an uncoordinated system to a public coordinated cellular mobile telecommunication system such as a DECT to GSM system (figure 2, column 2, lines 44-65) including:

assessing in the first base station the information content and reception quality of the messages (figure 1, central fixed part (CFP) in the DECT system provides analysis, column 7, lines 9-23); and

transmitting, via the first base station, a list of parameters organized on the basis of the reception quality of the messages, which are required for handing over a respective telecommunications connection and which are respectively associated with any one of the at least one second base station, on a second telecommunications Broadcast Control Channel to first mobile parts which are located in the first cell (mobile receives and stores hand out information from the CFP where subsequent hand-off is initiated by the fixed side of the DECT system, the CFP or initiated by the mobile terminal, column 7, lines 23-49).

Since Coursey and Hjern both teach hand-off between a private and public telecommunication system but with call handling differences, it would have been obvious to one of ordinary skill in the art at the time of the invention to alternatively modify the signal assessment and transmission control by the fixed system side of Coursey with the method taught by Hjern such that the invention can be implemented with the protocols and functions which are currently available.

As to claim 12, Coursey teaches where the first monitoring mode is switched on at predetermined periodic time intervals, beginning when the first base station is initially switched on (the Mobile Station Emulator (14), after turned on, monitors its assigned paging channel for messages for hand off etc, column 5, lines 14-29).

As to claim 15, Coursey teaches the wireless telecommunication is carried out using the 800 MHz cellular network, GSM and various PCS standards that include PCS-1900, DCS-1800, DECT (TDMA-TDD) and PACTS that utilize CDMA, FDMA or TDMA access methods and using at least one of TDD and FDD principles (column 3, lines 49-67).

4. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable Coursey et al. (U.S. Patent 5,995,839) and Hjern et al. (U.S. Patent 5,873,033) with a view to Choi (U.S. Patent 6,278,883).

As to claims 13 and 14 with respect to claim 11, Coursey modified does not teach a method for controlling hand over of telecommunications connections further comprising initiating a second monitoring mode via at least one of a mobile part and a base station for handing off information relevant to telecommunications connections for transmitting asymmetric data links at a maximum or minimum data transmission rate in a downlink direction and at a maximum/ minimum data transmission rate in an uplink direction via the respective base station.

Choi teaches a network access protocol (CDPA) that supports an asymmetric data rate coverage area pattern to be utilized private local and public wireless systems (figure 4A, column 3, lines 1-45, column 4, line 61 to column 5, line 21). Choi teaches a formatted data control packet to signal symmetric or asymmetric data rate where the uplink data rate is the same or different than the downlink data rate determined during registration of the mobile with the base station (figure 2, column 7, line 61 to column 8, line 46). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Coursey modified with the asymmetric data rate control of Choi according to the desired range and to minimize the probability of collision within or between a private and public local wireless system.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J Jackson whose telephone number is (703) 305-



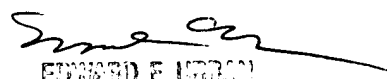
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5291. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJJ

  
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